



Experience of Care: Patient Safety and Clinical Quality

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Director

**Agency for Healthcare Research and
Quality**

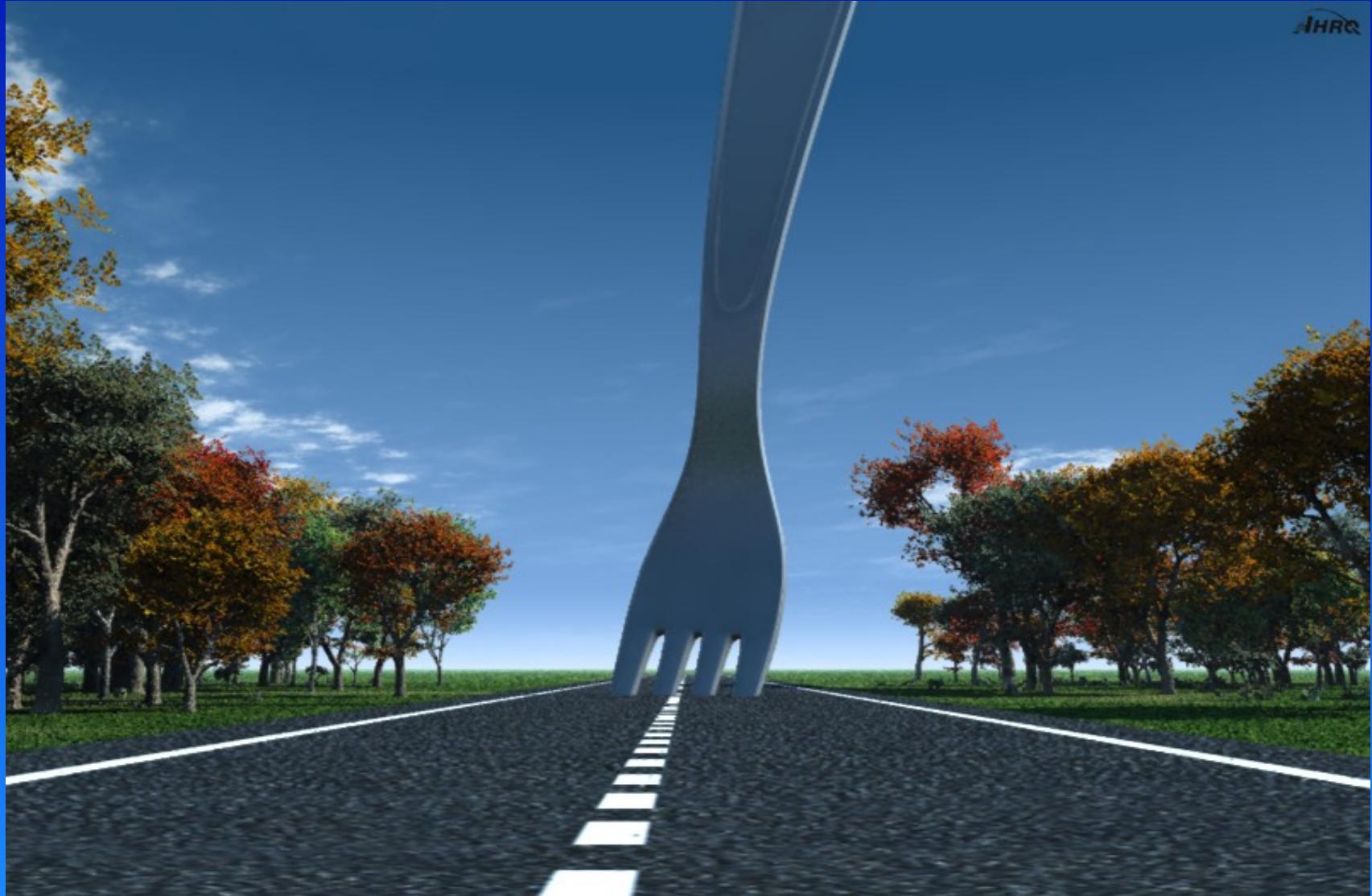
2011 Military Health System Conference

Why Quality Improvement Remains a Challenge

“The fundamental problem with the quality of American medicine is that we’ve failed to view delivery of health care as a science. ... That’s a mistake, a huge mistake.”

*Peter Pronovost, M.D., PhD,
Johns Hopkins Hospital*





Research that Focuses on Patient Outcomes

Patient-Centeredness: The Final Frontier?

- Patient-centeredness may be the most challenging of all six domains of quality, because it is so difficult to define and measure
- But, it is also likely the most important, because it includes elements of all other domains



A Quality Agenda for System Transformation

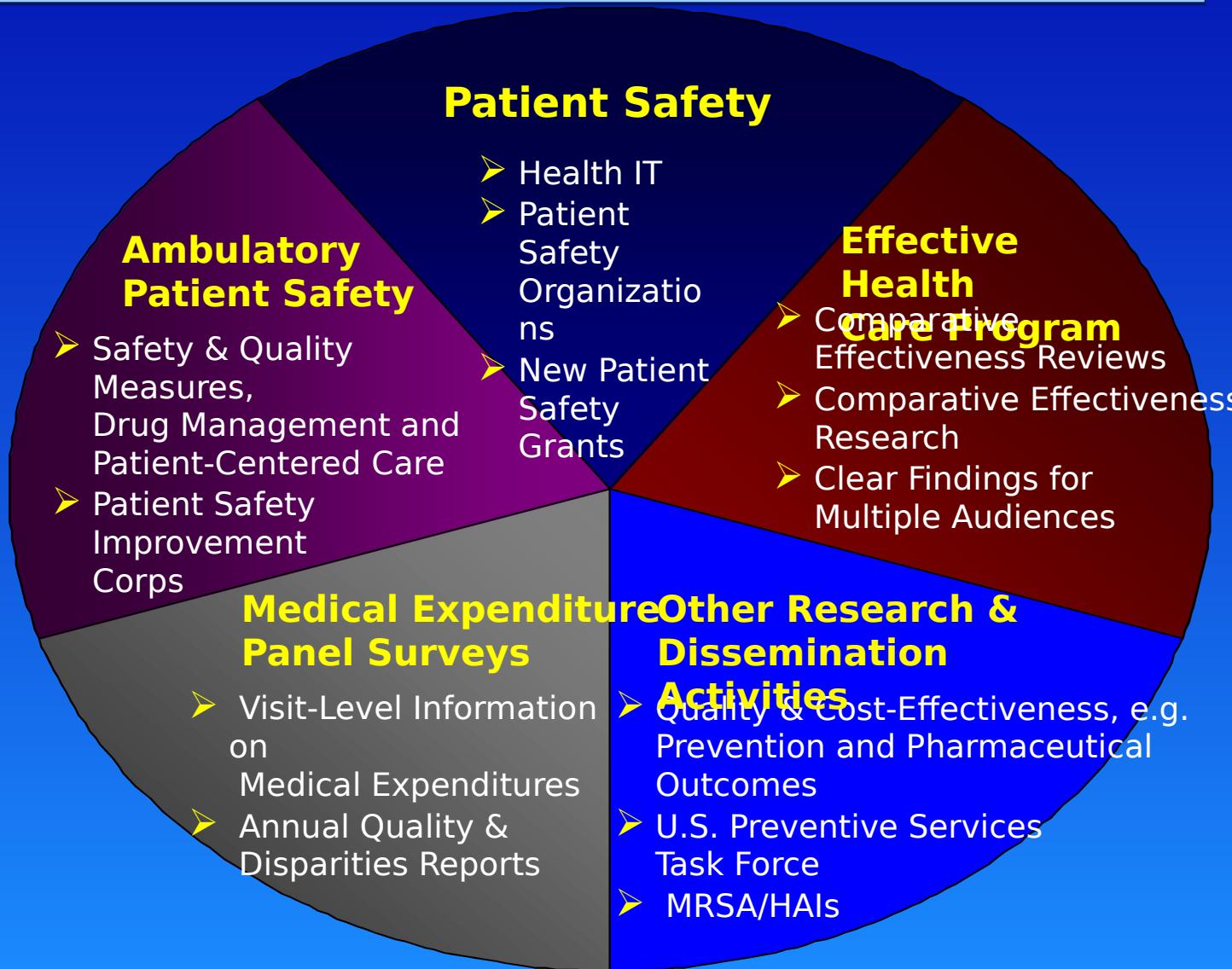
- Recent legislation addresses:
 - Access
 - Affordability
 - Information technology
 - Performance measurement, reporting, and improvement
 - Evidence and information
 - Equity
 - Value
- Together, these components comprise a quality agenda

Experience of Care. Patient Safety and Clinical Quality



- **Building A Culture of Safety**
- Improving Quality Through Patient-Centered Outcomes Research
- 21st Century Health Care: A Patient-Centered Health System
- Questions

AHRQ Priorities





The Quadruple Aim: The MHS Value Model

Readiness

Ensuring that the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.

Experience of Care

Providing a care experience that is patient and family centered, compassionate, convenient, equitable, safe and always of the highest quality.



Population Health

Reducing the generators of ill health by encouraging healthy behaviors and decreasing the likelihood of illness through focused prevention and the development of increased resilience.

Per Capita Cost

Creating value by focusing on quality, eliminating waste, and reducing unwarranted variation; considering the total cost of care over time, not just the cost of an individual health care activity.

The Quadruple Aim and AHRQ

AHRQ's mission and goals encompass much of the Quadruple Aim

Experience of Care

Population Health

**Value
(Per capita cost)**

Readiness

- Patient-centered, information-rich health care
- Tailoring information to needs of specific patient populations
- Patient-centered care in a value-driven health care environment
- Delivering the right treatment, to the right patient, at the right time

Building A Culture of Safety

- MHS engages in several AHRQ quality improvement initiatives, including:
 - Hospital Survey on Patient Safety Culture
 - Helps hospitals assess the culture of safety in their institutions
 - Patient Safety Indicators
 - Helps health system leaders identify potential adverse events occurring during hospitalization
 - Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
 - Standardized survey and data collection for measuring patient perspectives on hospital care
 - Common Formats
 - MHS participates in development of Common Formats for reporting patient safety events to Patient Safety

Advances in Combat Health Care



“What we’ve seen in the wars in Iraq and Afghanistan is a dramatic reduction in the death rate for troops wounded by roadside bombs, by sniper attacks. Troops are receiving tremendous wounds that were not survivable before.”

Atul Gawande, MD
AHRQ Annual Conference
September 28, 2010

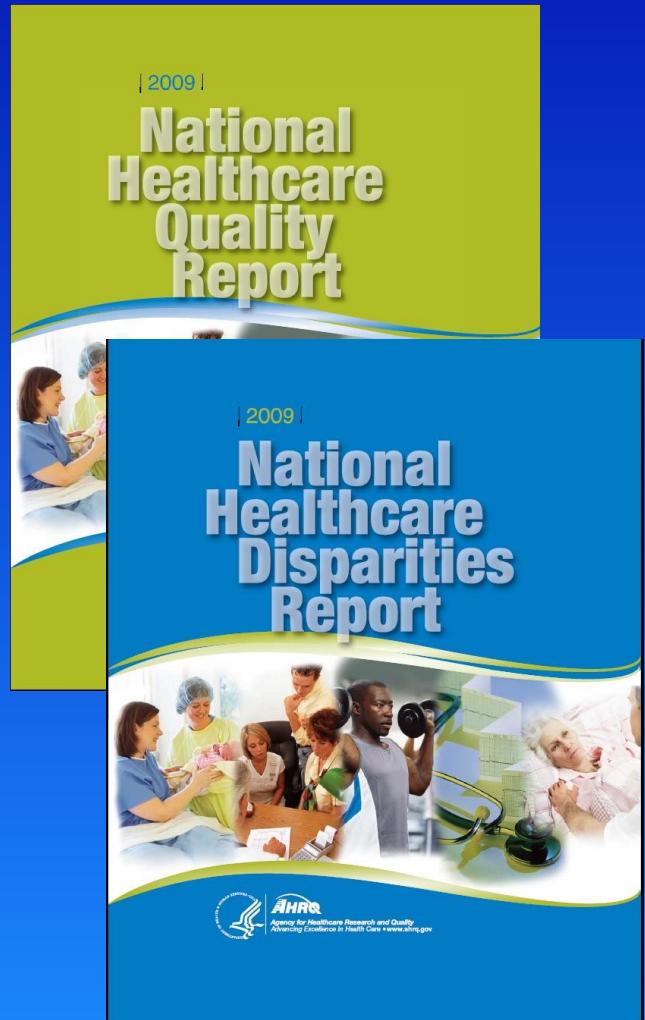
Benefits of MHS to the U.S. Health Care System



- One of the largest health systems in the nation, the Military Health System has contributed greatly to national efforts toward interoperability
- Provides an opportunity for the U.S. health care system to examine proposed solutions for expanding service to diverse populations
- Offers health service researchers a window into the challenges that the future transformed health system might face
- Constant innovation in the military system's delivery of health care is relevant at the national level

But Overall, the Pace of Improvement in the U.S. is Slow

- Quality is improving, but the pace is slow (median rate about 2% a year), especially for preventive care and chronic disease management
- Some areas merit urgent attention, including patient safety and health care-associated infections
- Many disparities are not decreasing



2009 Quality Report: Key Findings

- Median level of patients receiving needed care was 58% for core quality measures
- Among outcomes measures tracked for HAIs, only one improved (adults surgery patients with post-operative pneumonia) while 3 worsened, especially postoperative sepsis.
- **Improvement is slow:** a 2% median rate of change/year among 33 core measures
- Improvements spread unevenly across care settings, with hospital care improving at annual rate of 6%, compared to 1% for outpatient settings

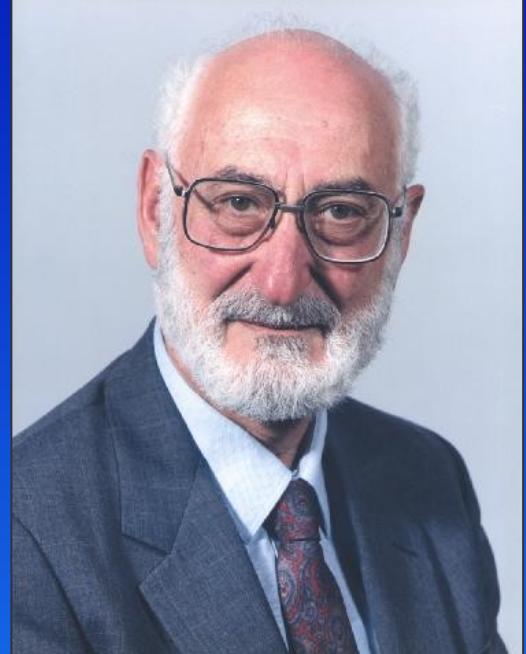
Experiences of Center Patient Safety and Clinical Quality



- Building A Culture of Safety
- **Improving Quality Through Patient-Centered Outcomes Research**
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- Questions

Avedis Donabedian on Patient-Centered Care

- “Our criteria and standards need to be more flexibly adaptable to the finer clinical peculiarities of each case. In particular, we need to learn how to accurately elicit the preferences of patients to arrive at truly individualized assessments of quality.”



The Quality of Care: How Can It Be Assessed?

JAMA 1988;260:1743-1748

AHRQ's Effective Health Care Program (EHC)

Evidence-Based Practice Centers (14) (EPC)

Comparative Effectiveness Reviews

EPC Reports (“Generalist Reports”)

DEcIDE Networks (13)

(Developing Evidence to Inform Decision About Effectiveness)

New Research Reports

Research Tools

CERTS (14)

Centers for Education and Research on Therapeutics

CERTS Reports

Eisenberg Center

Clinical Decisions & Communications Science

Clinical Guides

Consumer Guides

Policymaker Guides

SRC
Scientific Resource Center

AHRQ EHC Grants:

- Emphasize unbiased analysis, involvement from outside groups
- Fund research aimed at changing clinician behavior

EHC Summary Guides

Policymaker

 Effective Health Care

Particle Beam Radiation Therapies for Cancer

A SUMMARY FOR POLICYMAKERS

Particle beam radiation therapy (PBRT) is an alternative to other types of radiation therapies for treating cancer. This summary reviews the different types of PBRT, their potential advantages and disadvantages, and their current uses. At present, there is very limited evidence comparing the safety and effectiveness of PBRT with other types of radiation therapies for people with cancer. Therefore, it is not possible to draw conclusions about the comparative safety and effectiveness of PBRT at this time.

POLICY ISSUE

PBRT has theoretical advantages that might make it safer or more effective than other types of radiation therapy for treating certain cancers. However, PBRT facilities are not available in many areas and are expensive to build and operate. Moreover, there is limited clinical evidence that directly compares PBRT with other types of radiation therapy. Policymakers must weigh several considerations when deciding whether to invest in or use PBRT. This summary outlines the theoretical pros and cons of PBRT and provides a profile of the costs and current uses of this technology.

BOTTOM LINE

- Most studies of PBRT have looked at its use in treating tumors that are inoperable or adjacent to critical body parts, such as tumors of the eye, head, neck, and spine.
- Over 60,000 people worldwide have been treated with PBRT since the 1970s.
- There are at least 30 operating PBRT facilities in the world; 7 are in the United States.
- The current cost of building a PBRT facility in the United States ranges from \$20 million to \$175 million, depending on the size and scope of the facility.
- Evidence about the effectiveness and harms of PBRT compared with other cancer treatments is lacking.

SOURCE The source material for this summary is a Technical Brief, Particle Beam Radiation Therapies for Cancer (2009). The Technical Brief was prepared by the Tufts Medical Center Evidence-based Practice Center. The Agency for Healthcare Research and Quality (AHRQ) funded the Technical Brief and this summary. This summary was developed using feedback from policymakers who reviewed preliminary drafts. The full Technical Brief is available at www.effectivehealthcare.ahrq.gov.

Clinicians

 Effective Health Care Program

Clinician Guide
Heart and Blood Vessel Conditions
Atrial Fibrillation

Radiofrequency Ablation for Atrial Fibrillation

This guide summarizes the clinical evidence on the effectiveness and safety of catheter-based radiofrequency ablation (RFA) compared with anti-arrhythmic drugs (AADs) for the treatment of atrial fibrillation (AF). This guide does not address other aspects of AF treatment, including anticoagulation, rate control medications, or treatments other than RFA and AADs used to restore sinus rhythm.

Clinical Issue

Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia. AF can be paroxysmal, persistent (more than 7 days), or chronic (more than 1 year). AF often causes significant symptoms, such as palpitations, shortness of breath, and fatigue, and is associated with a fivefold increased risk of stroke and approximately a twofold increased risk of death. Many people with AF can be adequately treated with drugs that control heart rate without restoring normal heart rhythm. However, for some people, rate control alone does not relieve the symptoms. Those people may benefit from therapies to restore normal cardiac rhythm. Sometimes a normal rhythm can be

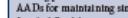
maintained with medications, but anti-arrhythmic drugs (AADs) can have serious side effects.

An alternative method for restoring normal cardiac rhythm is radiofrequency ablation (RFA). With RFA, a catheter is advanced into the heart and positioned in the area of an abnormal electrical circuit. On contact, the catheter tip heats the cardiac tissue using radiofrequency energy. The resulting tissue destruction prevents the abnormal electrical signals from being conducted. Several different ablation techniques are used for AF. With most techniques, the ablation targets are sites in the pulmonary veins and the left atrium.

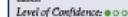
Clinical Bottom Line

Evidence is insufficient to determine the effectiveness of RFA as first-line therapy compared with AADs.

Among patients with AF who have failed at least one course of AADs, RFA is more effective than another trial of AADs for maintaining sinus rhythm at 1 year.

Level of Confidence: 

Serious complications are uncommon after RFA, but stroke and cardiac tamponade each occur in about 1 percent of cases.

Level of Confidence: 

Confidence Scale

The confidence ratings in this guide are derived from a systematic review of the literature. The level of confidence is based on the overall quantity and quality of clinical evidence.

High:  There are consistent results from good quality studies. Further research is very unlikely to change the conclusions.

Medium:  Findings are supported, but further research could change the conclusions.

Low:  There are very few studies, or existing studies are flawed.

Consumers

 Effective Health Care Program

Cuando se tiene una biopsia del seno

Guía para las mujeres y sus familias



Summarize research review findings on the benefits and harms of different treatment options. Provide useful background on health conditions. Medication guides contain basic wholesale price information.

HHS Strategic Plan

- The Secretary's Nine Strategic Priorities Include:
 - Transform Health Care
 - Implement the Recovery Act
 - Accelerate the Process of Scientific Discovery to Improve Patient Care

SECRETARY'S
STRATEGIC INITIATIVES
& KEY INTER-AGENCY
COLLABORATIONS



www.hhs.gov

Agenda for Health System Transformation

- Recent legislation addresses:
 - Access
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 - Value
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American Recovery and Reinvestment Act of 2009

- AHRQ's Effective Health Care Program created by Medicare Modernization Act of 2003
- From 2005-2009, received \$12 million from Congress for CER
- Program has published more than 45 products, including guides for clinicians and consumers
- The American Recovery and Reinvestment Act contained \$1.1 billion for comparative effectiveness research, including \$300 million to AHRQ



Patient Protection and Affordable Care Act

■ Health Measurement and Improvement Elements:

- Interagency working group on quality
- Quality measure development
- Data, collection, analysis and public reporting
- Standardized approaches to data on race, ethnicity, disability status, and language for all federal programs by 2010
- Extends Medicare requirements for data collection to Medicaid and



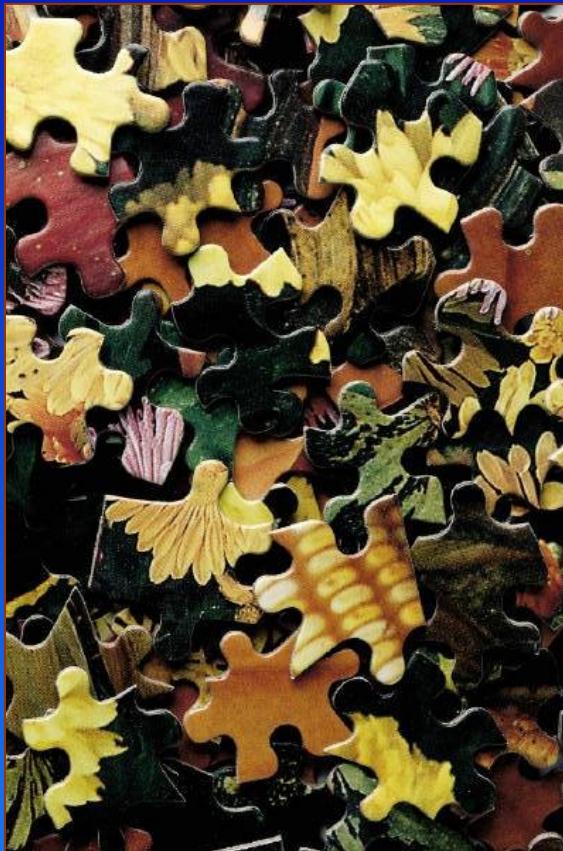
Patient-Centered Outcomes Research Institute

- Sets priorities and coordinates with existing agencies that support patient-centered outcomes research
- Prohibits findings to be construed as mandates on practice guidelines or coverage decisions and contains patient safeguards
- Provides funding for AHRQ to disseminate research findings of the Institute and other government-funded research, and to train researchers on patient-centered outcomes research and build capacity for research



What's Next? National Health Care Quality Strategy

- Part of Affordable Care Act
- Builds on work of federal, state, local and private initiatives; identifies what works and what needs improvement
- Move from provider-level transparency to a patient-focused approach





National Strategy for Quality: Three Pillars



Experience of Care. Patient Safety and Clinical Quality



- Building A Culture of Safety
- Improving Quality Through Patient-Centered Outcomes Research
- **21st Century Health Care: A Patient-Centered Health System**
- Questions



my own network, powered by AHRQ



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Load your own hospital discharge data



Software



Software

Select measures and website options



Generate web pages on your own machine

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- MONAHRQ is free software from AHRQ
- MONAHRQ generates a reporting website using your own hospital discharge data
 - Quality Indicators
 - Utilization and costs
- MONAHRQ calculates:
 - Preventable hospitalizations
 - Rates by region
- MONAHRQ lets you control your data and your website

Input your data. Output your website.

monahq.ahrq.gov



States Are Using New MONAHRQ Tool: Nevada & Hawaii Web Sites Now Live

Hawaii Health Information Corporation - Hawaii's Source for Healthcare Data - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Favorites Address <http://hhic.org/publicreports.asp> Go Links

HAWAII HEALTH INFORMATION CORPORATION
Hawaii's Source for Healthcare Data

HOME
QUESTIONS
CONTACT US
SITEMAP

DATA & RESEARCH HHIC PUBLIC REPORTS RESOURCE INFORMATION ABOUT HHIC

HHIC PUBLIC REPORTS...Generated by MONAHRQ

HHIC Public Reports...generated by MONAHRQ is an interactive querying site that users can navigate to learn about health care. MONAHRQ is a software product that enables organizations – such as HHIC – to input data and generate a data-driven Web site.

HHIC Public Reports website presents information in a ready to use format on:

- rates of conditions and procedures at the county level, and
- preventable hospitalizations at the county level.

GO to access *HHIC Public Reports*. Questions? Contact info@HHIC.org or 1-808-534-0288.

MONAHRQ
Input your data. Output your website.

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Innovations Exchange

Web-based Repository of Cutting-Edge Service Innovations

- National electronic learning hub for sharing health care service innovations, bringing innovators and adopters together
- Searchable database featuring innovation successes and failures, expert commentaries, lessons learned, etc.,
- Designed to help health care “Agents of Change” improve quality

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Search results for: **women**
You found: 108 Innovation Profiles, 223 QualityTools, 1 Learn & Network result, 1 Resources result.

[Show summaries](#) | [Hide summaries](#)

P **Innovation Profiles**

- 1. [Personalized Support Improves Patient-Physician Communication and Enhances Decision Making for Breast Cancer Patients](#) (09/16/2009)
The University of California San Francisco Breast Care Center Decision Services unit offers a consultation planning, recording, and summarizing service that helps to improve patient-provider communication and patient decisionmaking.
- 2. [Crisis Management Simulation Course Receives Positive Reviews, Enhances Communication and Teamwork Among Labor and Delivery Practitioners During Crises](#) (12/16/2009)
Crisis Resource Management is a 7-hour course for labor and delivery practitioners that uses various strategies of crew resource management, a safety program developed by the aviation industry, to create realistic simulations designed to facilitate improvement of teamwork and communication skills in a real labor and delivery crisis.
- 3. [Online Access to Low-Dose Birth Control Reduces Barriers to Reproductive Health](#) (07/02/2009)
Planned Parenthood of the Columbia/Willamette created an online service that offers Oregon and Washington women easy, 24/7 access to low-dose, hormonal contraception without requiring an office visit or a trip to the drug store.

[List all 108 Innovation Profiles](#)

Q **QualityTools**

- 1. [Food Safety for Moms-to-Be Toolkit](#) (05/05/2008)
This educational kit is intended for nurses, midwives, and other educators who make presentations on food safety for pregnant women.
- 2. [Drinking and Reproductive Health: A Fetal Alcohol Spectrum Disorders Prevention Tool Kit](#) (04/14/2008)
This tool kit provides information for clinicians on preventing fetal alcohol syndrome.
- 3. [Now That You've Tested Positive For Group B Strep \(GBS\), Learn How to Help Protect Your Baby](#) (06/09/2008)
This fact sheet provides information for pregnant women who have tested positive for Group B Strep (GBS) on how to

www.innovations.ahrq.gov

NHQR Findings: Health Care-Associated Infections (HAIs)

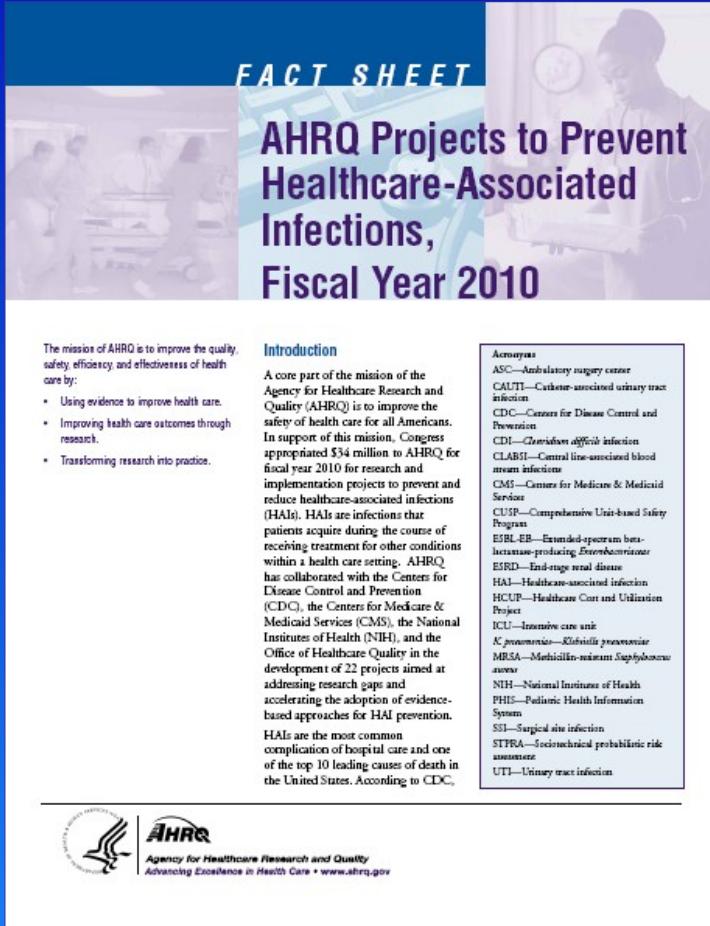
Process Measures	Annual rate of Improvement (%)
Adult surgery pts. who received prophylactic antibiotics w/in 1 hr. before surgical incision	26.4
Adult surgery pts. who had prophylactic antibiotics discontinued w/in 24 hrs. after surgery end time	32.9
Outcome Measures	
Adult surgery pts. w/postoperative pneumonia	11.6
Adult surgery pts. w/postoperative catheter-related UTI	-3.6
Postoperative sepsis	8.0



Central Line-Associated Bloodstream Infection (CLABSI) Rates Sustained

- More than 100 participating ICUs in Michigan have maintained near-zero rates beyond initial 18-month target, for an additional 18 months
- Key factors to sustainability, as noted by participating ICU teams:
 - Continued feedback of infection data
 - Improvements in safety culture as a result of the project
 - Reducing infections rates was a shared goal rather than a statewide competition
 - “An Unremitting belief in the preventability of bloodstream infections”

\$34 Million to Expand Fight Against HAIs



FACT SHEET

AHRQ Projects to Prevent Healthcare-Associated Infections, Fiscal Year 2010

The mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care by:

- Using evidence to improve health care.
- Improving health care outcomes through research.
- Transforming research into practice.

Introduction

A core part of the mission of the Agency for Healthcare Research and Quality (AHRQ) is to improve the safety of health care for all Americans. In support of this mission, Congress appropriated \$34 million to AHRQ for fiscal year 2010 for research and implementation projects to prevent and reduce healthcare-associated infections (HAIs). HAIs are infections that patients acquire during the course of receiving treatment for other conditions within a health care setting. AHRQ has collaborated with the Centers for Disease Control and Prevention (CDC), the Centers for Medicare & Medicaid Services (CMS), the National Institutes of Health (NIH), and the Office of Healthcare Quality in the development of 22 projects aimed at addressing research gaps and accelerating the adoption of evidence-based approaches for HAI prevention. HAIs are the most common complication of hospital care and one of the top 10 leading causes of death in the United States. According to CDC,

Acronyms

ASC—Ambulatory surgery center
CALUTI—Catheter-associated urinary tract infection
CDC—Centers for Disease Control and Prevention
CDI—Candida difficile infection
CLABSI—Central line-associated blood stream infection
CMS—Centers for Medicare & Medicaid Services
CUP—Comprehensive Unit-based Safety Program
ESBL-EB—Extended-spectrum beta-lactamase-producing <i>Escherichia coli</i>
EIRD—End-stage renal disease
HAI—Healthcare-associated infection
HCIUP—Healthcare Cost and Utilization Project
ICU—Intensive care unit
K. pneumoniae— <i>Klebsiella pneumoniae</i>
MRSA—Methicillin-resistant <i>Staphylococcus aureus</i>
NIH—National Institutes of Health
PHIS—Pediatric Health Information System
SSI—Surgical site infection
STTR—Small business technology transfer
UTI—Urinary tract infection

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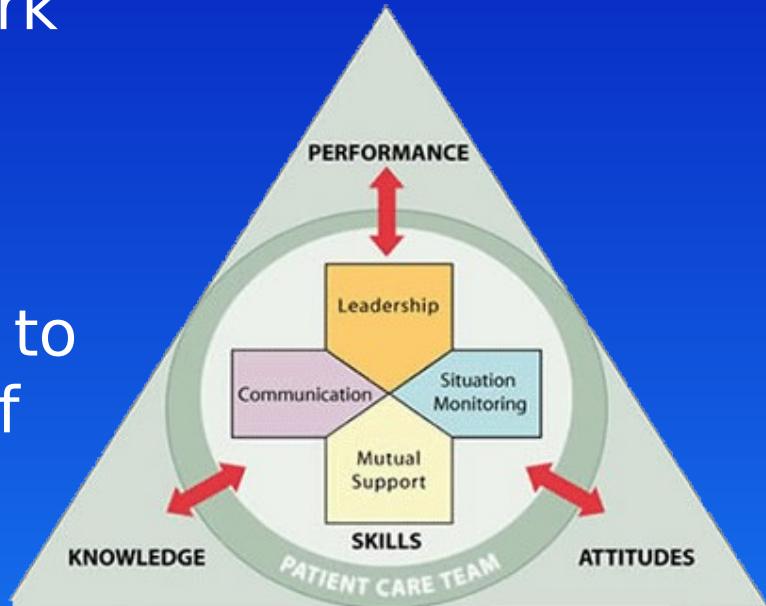
- **Goal:** To help expand efforts to fight HAIs in hospitals, ESRD clinics, and ambulatory care and long-term care settings
- AHRQ has collaborated with CDC, CMS, and NIH to identify research gaps to improve HAI prevention

Complete list of institutions and projects funded available at: www.ahrq.gov/qual/haify10.htm

Improving Patient Safety with TeamSTEPPS®

■ TeamSTEPPS®:

- Evidence-based teamwork system to improve communication and teamwork
- Ready-to-use curriculum to integrate into all areas of health system
- Rooted in more than 20 years of research
- Developed by DoD's Patient Safety Program in collaboration with AHRQ



Improving Patient Safety with TeamSTEPPS®

- Three phases of TeamSTEPPS
 - **Assess the need:** Determine an organization's readiness
 - **Plan, train and implement:** Options include all of tools and strategies, a phased-in approach, or individual tools at specific intervals
 - **Sustainment:** Sustain and spread improvements in teamwork performance, clinical processes and outcomes resulting from TeamSTEPPS initiative



National Implementation of TeamSTEPPS®

- To meet demand, AHRQ and DoD have teamed with American Institutes for Research to build a national training and support network
- **Five team resource centers:** Duke Medical Center (NC), Carillion Clinic (VA), U-Minnesota Fairview Hospital (MN), Creighton University Medical Center (NE), and U-Washington Medical Center (WA)
- Resource centers creating national network of master trainers, who offer TeamSTEPPS training to frontline providers



The U.S. Health Information Knowledge Base (USHIK)

Metadata Registry of Health Care Interoperability Standards

- AHRQ-funded collaboration of federal agencies including the Military Health System
- Maintains the Metadata Registry, providing a one-stop-shop for easy comparisons of health data standards to support health care initiatives:
 - The Healthcare Information Technology Standards Panel
 - AHRQ's Center for Quality Improvement and Patient Safety (CQuIPS)
 - State All-Payers Metadata, facilitating cross-

Keeping the Patient at the Center



- Quality is defined as care that is safe, timely, effective, efficient, equitable and patient-centered
- Patient-centeredness is perhaps the most difficult goal to achieve
- But it's the most important, because it's why we're here

Future Directions/Questions

- How do we motivate patients to seek reliable health information and use it to make decisions?
- How do we drive the message that charting the path to high quality, affordable care is a team sport?
- How do we continue building on foundations in comparative effectiveness research, health IT, quality and safety?
- How do we make health



Thank You



AHRQ Mission

To improve the quality, safety, efficiency, and effectiveness of health care for all Americans

AHRQ Vision

As a result of AHRQ's efforts, American health care will provide services of the highest quality, with the best possible outcomes, at the lowest cost

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